In the Claims

1 - 15. (Canceled)

16.   (Currently Amended)   A method for facilitating multicasting of a file to a plurality of end users, comprising:

multicasting ~~control~~ service <u>control</u> information for reception by a plurality of end user download devices, wherein multicasting said ~~control~~ service <u>control</u> information includes receiving said ~~control~~ service <u>control</u> information initially transmitted from a centralized control apparatus <u>over a single unidirectional communication path,</u> generating replicated versions of said ~~control~~ service <u>control</u> information by a multicast-capable distribution network and forwarding said replicated versions of said ~~control~~ service <u>control</u> information for reception by each one of the group of said end user download devices;

configuring the multicast-capable distribution network to route said ~~control~~ service <u>control</u> information by downstream apparatuses within the multi-cast capable network in response to receiving said ~~control~~ service <u>control</u> information;

receiving a plurality of requests for reception of offered content designated in said ~~control~~ service <u>control</u> information, <u>wherein said offered content is transmitted from said centralized control apparatus</u> wherein said requests are received from a group of said end user download devices~~, wherein said requests are received within a prescribed interval of time~~; and

multicasting said offered content for reception by each one of said end user download devices in the group;

~~wherein a multicast-capable distribution network facilitates multicasting of said control service information, facilitates receiving said requests for reception and facilitates multicasting said offered content~~

<u>wherein said group of end user download devices and said multi-cast distribution network are cooperable for using information learned from said service control information for connecting said group of end user download devices to said offered content without</u>

said group of end user download devices communicating to said centralized control apparatus.

17.   (Currently Amended)   The method of claim 16 wherein receiving said ~~control~~ service control information from the centralized control apparatus includes receiving an unsolicited advertisement of said ~~control~~ service control information from the centralized control apparatus.

18.   (Currently Amended)   The method of claim 16 wherein configuring the multicast-capable distribution network includes being statically configured for routing said ~~control~~ service control information along pre-defined paths within the multi-cast capable distribution network.

19.   (Currently Amended)   The method of claim 16 wherein configuring the multicast-capable distribution network includes being configured for dynamically enabling access to said ~~control~~ service control information by downstream apparatuses within the multi-cast capable network.

20.   (Currently Amended)   The method of claim 16 wherein said group of end user download devices waits for a random interval between 0 second and a prescribed interval of time before sending the request,   wherein the prescribed interval of time begins at a designated time and extends for a designated duration .

21.   (Currently Amended)   The method of claim 20 wherein receiving the plurality of requests for reception of a file designated in said ~~control~~ service control information includes facilitating synchronization of the group of said end user download devices for enabling reception of said requests by the multicast-capable distribution network within the prescribed interval of time.

22.   (Original)   The method of claim 21 wherein facilitating synchronization of the group of said end user download devices includes:

    synchronizing a clock of each one of said end user download devices with a reference time maintained by the multicast-capable distribution network; and

    synchronizing a clock of a multicast server apparatus with the reference time maintained by the multicast-capable distribution network.

23.   (Original)   The method of claim 16, further comprising:

facilitating synchronization of the group of said end user download devices for enabling reception of said requests by the multicast-capable distribution network within a prescribed interval of time.

24.   (Currently Amended)   The method of claim 23 wherein:

receiving the plurality of requests for reception of a file designated in said ~~control~~ service control information includes receiving said requests within the prescribed interval of time; and

the prescribed interval of time beginning at a designated time and extending for a designated duration.

25.   (Original)   The method of claim 16 wherein multicasting said offered content includes:

receiving an initially transmitted copy of said offered content from a centralized control apparatus;

generating replicated versions of said offered content, wherein said replicated versions are generated by the multicast-capable distribution network; and

forwarding said replicated versions of said offered content for reception by each one of the group of said end user download devices.

26.   (Currently Amended)   A system for facilitating multicasting of a file to a plurality of end users, comprising:

a multicast-capable distribution network;

a centralized server coupled to the multicast-capable distribution network;

a plurality of end ~~use~~ user download devices coupled to the multicast-capable distribution network; and

a data processor program;

the data processor program being capable of enabling the multicast-capable distribution network to facilitate:

multicasting ~~control~~ service control information for reception by the plurality of end user download devices;

receiving a plurality of requests for reception of offered content designated in said ~~control~~ service <u>control</u> information, wherein said requests are received from a group of said end user download devices;

receiving said ~~control~~ service <u>control</u> information initially transmitted from a centralized control apparatus;

generating replicated versions of said ~~control~~ service <u>control</u> information, wherein said replicated versions are generated by the multicast-capable distribution network;

multicasting said replicated versions of said ~~control~~ service <u>control</u> information for reception by each one of the group of said end user download devices; and

~~configuring the multicast-capable distribution network to route said control service information by downstream apparatuses within the multi-cast capable network in response to receiving said control service information~~

<u>wherein the group of end user download devices and the multicast-capable distribution network are cooperable for using information learned from the service control information for connecting the group of end user download devices to the offered content without the group of end user download devices communicating to the centralized server.</u>

27.   (Previously Canceled).

28.   (Currently Amended)   The system of claim 26 wherein enabling the multicast-capable distribution network to facilitate receiving said ~~control~~ service <u>control</u> information from the centralized control apparatus includes enabling the multicast-capable distribution network to facilitate receiving an unsolicited advertisement of said ~~control~~ service <u>control</u> information from the centralized control apparatus.

29.   (Previously Canceled).

30.   (Currently Amended)   The system of claim 26 wherein the multicast-capable distribution network is statically configured for routing said ~~control~~ service control information along pre-defined paths within the ~~multi-cast~~ multicast-capable distribution network.

31.   (Currently Amended)   The system of claim 26 wherein the multicast-capable distribution network is configured for dynamically enabling access to said ~~control~~ service control information by downstream apparatuses within the ~~multi-cast~~ multicast-capable distribution network.

32.   (Currently Amended)   The system of claim 26 wherein enabling the multicast-capable distribution network to facilitate receiving the plurality of requests for reception of a file designated in said ~~control~~ service control information includes enabling the multicast-capable distribution network to facilitate receiving said requests within a prescribed interval of time.

33.   (Original)   The system of claim 32 wherein the prescribed interval of time begins at a designated time and extends for a designated duration.

34.   (Currently Amended)   The system of claim 32 wherein enabling the multicast-capable distribution network to facilitate receiving the plurality of requests for reception of a file designated in said ~~control~~ service control information includes enabling the multicast-capable distribution network to facilitate synchronization of the group of said end user download devices for enabling reception of said requests by the multicast-capable distribution network within the prescribed interval of time.

35.   (Original)   The system of claim 34 wherein enabling the multicast-capable distribution network to facilitate synchronization of the group of said end user download devices includes enabling the multicast-capable distribution network to facilitate:

      synchronizing a clock of each one of said end user download devices with a reference time maintained by the multicast-capable distribution network; and

      synchronizing a clock of a multicast server apparatus with the reference time maintained by the multicast-capable distribution network.

36.   (Original)   The system of claim 26 wherein the data processor program is further capable of enabling the distribution network to facilitate:

synchronization of the group of said end user download devices for enabling reception of said requests by the multicast-capable distribution network within a prescribed interval of time.

37.   (Currently Amended)   The system of claim 36 wherein:

enabling the multicast-capable distribution network to facilitate receiving the plurality of requests for reception of a file designated in said ~~control~~ service control information includes enabling the multicast-capable distribution network to facilitate receiving said requests within the prescribed interval of time; and

the prescribed interval of time beginning at a designated time and extending for a designated duration.

38.   (Original)   The system of claim 26 wherein:

the multicast-capable distribution network is an Internet Protocol (IP) based distribution network; and

enabling the multicast-capable distribution network to facilitate receiving the plurality of requests for reception includes enabling the multicast-capable distribution network to facilitate receiving an Internet Group Management Protocol IGMP membership report from each one of the group of said end user download devices.

39.   (Currently Amended)   The system of claim 38 wherein the data processor program is further capable of enabling the multicast-capable distribution network to facilitate:

receiving said ~~control~~ service control information from a centralized control apparatus in response to receiving the IGMP membership report from each one of the group of said end user download devices.

40.   (Original)   The system of claim 26 wherein enabling the multicast-capable distribution network to facilitate multicasting said offered content includes enabling the multicast-capable distribution network to facilitate:

receiving an initially transmitted copy of said offered content from a centralized control apparatus;

generating replicated versions of said offered content, wherein said replicated versions are generated by the multicast-capable distribution network; and

forwarding said replicated versions of said offered content for reception by each one of the group of said end user download devices.

41.   (Currently Amended)   A data processor program product for facilitating multicasting of a file to a plurality of end users, comprising:

a data processor program processable by a data processor of a multicast-capable distribution network;

~~an apparatus~~ a memory from which the data processor program is accessible by the data processor; and

the data processor program being capable of enabling the data processor to facilitate

multicasting ~~control~~ service control information for reception by a plurality of end user download devices;

receiving a plurality of requests for reception of offered content designated in said ~~control~~ service control information, wherein said requests are received from a group of said end user download devices to said multicast-capable distribution network, wherein said group of end user download devices and said multicast-capable distribution network are cooperable for using information learned from said service control information for connecting said group of end user download devices to said offered content without said group of end user download devices communicating to said centralized server;

receiving said ~~control~~ service control information initially transmitted from a centralized control apparatus over a unidirectional communication path;

generating replicated versions of said ~~control~~ service control information, wherein said replicated versions are generated by the multicast-capable distribution network~~; and~~

~~multicasting said replicated versions of said control service information for reception by each one of the group of said end user download devices; and~~

~~configuring the multicast-capable distribution network to route said control service information by downstream apparatuses within the multi-cast capable network in response to receiving said control service information.~~

42.   (Previously Canceled).

43.   (Currently Amended)   The data processor program product of claim 41 wherein enabling the data processor to facilitate receiving said ~~control~~ service control information from the centralized control apparatus includes enabling the data processor to facilitate receiving an unsolicited advertisement of said ~~control~~ service control information from the centralized control apparatus.

44.   (Previously Canceled).

45.   (Currently Amended)   The data processor program product of claim 41 wherein enabling the data processor to facilitate configuring the multicast-capable distribution network includes enabling the data processor to facilitate statically configuring the multicast-capable distribution network for routing said ~~control~~ service control information along pre-defined paths within the ~~multi-cast~~ multicast-capable distribution network.

46.   (Currently Amended)   The data processor program product of claim 41 wherein enabling the data processor to facilitate configuring the multicast-capable distribution network includes enabling the data processor to facilitate dynamically enabling the multicast-capable distribution network for accessing said ~~control~~ service control information by downstream apparatuses within the ~~multi-cast~~ multicast-capable distribution network.

47.   (Currently Amended)   The data processor program product of claim 41 wherein enabling the data processor to facilitate receiving the plurality of requests for reception of a file designated in said ~~control~~ service control information includes enabling the data processor to facilitate receiving said requests within a prescribed interval of time.

48.   (Original)   The data processor program product of claim 47 wherein the prescribed interval of time begins at a designated time and extends for a designated duration.

49.   (Currently Amended)   The data processor program product of claim 47 wherein enabling the data processor to facilitate receiving the plurality of requests for reception of a file designated in said ~~control~~ service control information includes enabling the data processor to facilitate synchronization of the group of said end user download devices for enabling reception of said requests by the multicast-capable distribution network within the prescribed interval of time.

50.   (Original)   The data processor program product of claim 49 wherein enabling the data processor to facilitate synchronization of the group of said end user download devices includes enabling the data processor to facilitate:
        synchronizing a clock of each one of said end user download devices with a reference time maintained by the multicast-capable distribution network; and
        synchronizing a clock of a multicast server apparatus with the reference time maintained by the multicast-capable distribution network.

51.   (Original)   The data processor program product of claim 41 wherein the data processor program is further capable of enabling the distribution network to facilitate:
        synchronization of the group of said end user download devices for enabling reception of said requests by the multicast-capable distribution network within a prescribed interval of time.

52.   (Currently Amended)   The data processor program product of claim 51 wherein:

enabling the data processor to facilitate receiving the plurality of requests for reception of a file designated in said ~~control~~ service control information includes enabling the data processor to facilitate receiving said requests within the prescribed interval of time; and

the prescribed interval of time beginning at a designated time and extending for a designated duration.

53.   (Original)   The data processor program product of claim 41 wherein:

the multicast-capable distribution network is an Internet Protocol (IP) based distribution network; and

enabling the data processor to facilitate receiving the plurality of requests for reception includes enabling the data processor to facilitate receiving an Internet Group Management Protocol IGMP membership report from each one of the group of said end user download devices.

54.   (Currently Amended)   The data processor program product of claim 53 wherein the data processor program is further capable of enabling the data processor to facilitate:

receiving said ~~control~~ service control information from a centralized control apparatus in response to receiving the IGMP membership report from each one of the group of said end user download devices.

55.   (Original)   The data processor program product of claim 41 wherein enabling the data processor to facilitate multicasting said offered content includes enabling the data processor to facilitate:

receiving an initially transmitted copy of said offered content from a centralized control apparatus;

generating replicated versions of said offered content, wherein said replicated versions are generated by the multicast-capable distribution network; and

forwarding said replicated versions of said offered content for reception by each one of the group of said end user download devices.